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opacifiers. Additionally, examples of other non-leuco colorants include dyes or other pigments.

In one embodiment, the color forming composition can be prepared in solution which is substantially transparent or translucent. Any suitable liquid carrier, such as an alcohol or surfactant, can be used which are compatible with a particular leuco dye and other ingredients chosen for use. When the color forming composition is prepared in a solution form, it may be desirable to underprint a colored coating over at least a portion of the substrate beneath the leuco dye solution. The optional colored coating produces a background color that is visible underneath the solution layer. This colored coating can contain various non-leuco colorants such as other pigments and/or dyes. Alternatively, a non-leuco colorant may be added to the data layer to produce the desired background color. The activator can be admixed within the solution or coated onto the substrate either before or after the solution is coated thereon. If a background color is pre-printed, such coatings and compositions can be applied to the substrate using any of a variety of known techniques such as screen-printing, spin coating, sputtering, or spray coating. Each coating may be applied and then dried sequentially. In addition, such colored coatings may be applied over the color forming compositions of the present invention. It has been found that improved ambient light stability is achieved when a colored overcoat is applied to the color forming compositions of the present invention.

Various additional components, such as lubricants, surfactants, and materials imparting moisture resistance, can also be added to provide mechanical protection to the color forming composition. Other overcoat compositions can also be used and are well known to those skilled in the art.

*Electromagnetic radiation application for development*

In one embodiment of the present invention, the color forming composition can be applied to a substrate. The composition can be applied using any known technique such as spin-coating, screen printing, sputtering, spray coating, or the like. A variety of substrates can be used such as optical disks, polymeric surfaces, glass, ceramic, or cellulose papers. In one embodiment, the color forming composition can be applied to an optical disk